For a listing of individual options grouped by subject, see the Table of Contents. For a listing of options grouped by budget function, see the Appendix.

The reader should keep several cautions in mind. The separate options cannot be added to a grand total. A number of them are mutually exclusive, so that summing them would produce a meaningless figure. The savings effects of each are calculated separately, as if none of the other options were to become law, but in fact there would be interactions among the options if many of them were enacted. As a result, the consequences of enacting a package would be different from enacting each of its components in isolation.

The deficit reductions discussed in this volume represent only a first approximation of savings that might actually be realized. Variations on any particular option can, of course, be used to vary the savings it is likely to achieve. In some instances, a reduction in one program might result in program expansion elsewhere. Narrowing eligibility for VA hospital care, for example, would lead to some increase in Medicare outlays. In most cases, unless otherwise specified, such offsetting effects are not included in the estimates presented in this report.

Any enduring reduction in outlays or increase in revenues will ultimately result in a lower public debt, and therefore in lower net interest outlays than would otherwise be the case. Thus, a one-dollar cut in a spending program or a one-dollar tax increase lasting for the 1988-1992 period implies--at CBO's projected interest rate--an interest saving during 1993 of about 32 cents. While one could calculate such savings for any specific deficit reduction measure, the number would not be particularly useful since it would depend entirely on how many years of cumulative deficit reductions were assumed. The useful number is the net impact on interest outlays stemming from the whole budget enacted by the Congress. Hence, the estimates for specific options do not include induced interest savings.

In general, the estimated savings or revenue gains calculated for the deficit reduction options in this volume are derived from the economic assumptions underlying the CBO baseline. If different economic assumptions were used, or on the implementation of a budgetary plan that itself produced different economic results, then the savings and revenue gains from many of the options in this volume would have to be reestimated.

SECTION II

SPENDING AND REVENUE OPTIONS

The national defense portion of the federal budget supports two major activities: developing and procuring equipment for the armed forces and paying personnel to operate and maintain this equipment. In 1987, about 54 percent of the budget authority in the national defense function will be spent for personnel and for operation and support of the forces. The remaining 46 percent, referred to as the "investment accounts," will fund the research and development, procurement, and military construction associated with armed forces equipment (see Figure 1). From another perspective, national defense spending is devoted to several military purposes (so-called "missions"), with general purpose forces (that is, all those except strategic nuclear forces) receiving the largest share. Although spending for strategic nuclear forces often generates substantial debate, it will account for only about 13 percent of the total defense budget in 1987, according to Administration estimates.

After experiencing six consecutive years (1980-1985) of substantial real--or inflation-adjusted--growth, budget authority for national defense showed a real decline in 1987 for the second straight year (see Figure 2). This decrease resulted in part from overall budgetary pressures to reduce the deficit. Still, by postwar standards, real budget authority for defense remains high. As a percent of gross national product, defense spending is up from its 1980 level but well below the historical peacetime trends (see Figure 3). Defense outlays grew from roughly 5.0 percent of GNP in 1979 to 6.6 percent in 1986. This latter measure of the defense budget is perhaps the most comprehensive way to assess the resources the United States devotes to its security.

The portion of the defense budget devoted to investment has stabilized, but at a high level that has implications for budget flexibility. In 1987, 46 percent of defense budget authority will be allocated to investment, compared with only 37 percent in 1980. 1/ This apportionment is significant because emphasis on investment can constrain attempts to reduce defense outlays quickly. The Congress appropriates budget authority,

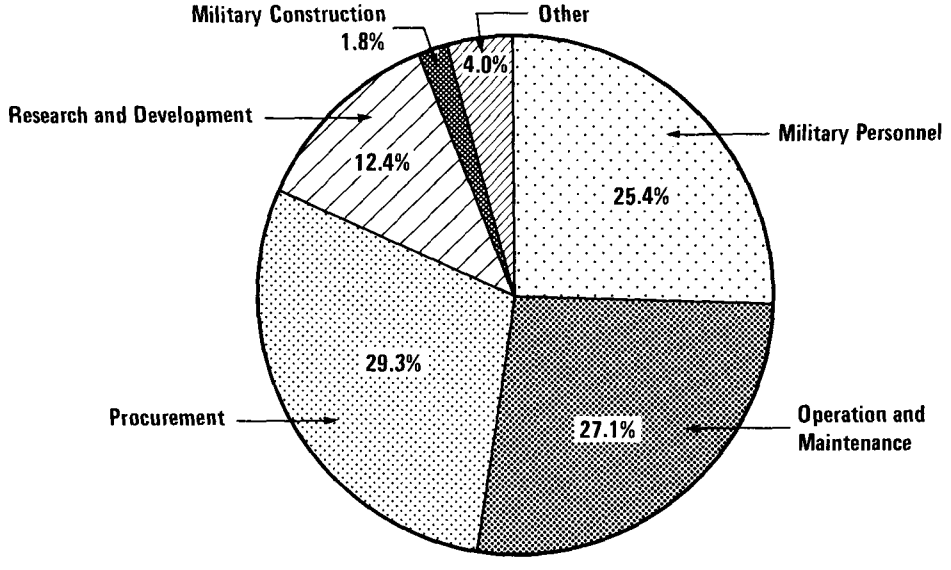
1. This shift in apportionment does not necessarily imply that the operating and support appropriations (that is, the operation and maintenance and military personnel accounts) are underfunded. In fact, since 1980 the operating accounts have increased in real terms by almost $25 billion, or nearly 20 percent.

which represents the right to enter into contracts for defense goods and services. Actual spending, or outlays, can take place over a number of years, depending on the nature of specific contracts. The lag of outlays behind Congressional authorizations is particularly long for weapons procurement. For example, for each dollar of budget authority provided each year in the procurement accounts, only 13 cents, on average, contributes to the outlays for that year. On the other hand, about 80 cents of each dollar authorized in the operation and maintenance accounts in a given year contributes to that year's outlays. It is outlays that affect the budget deficit, not budget authority. Therefore, in a budget plan with a high amount of investment budget authority in a certain year, the Congress could face two choices if it wished to realize near-term reductions in outlays and, thus, significant deficit reductions: either cut operating and support appropriations sharply or effect steeper cuts in overall defense budget authority.

THE ADMINISTRATION'S 1988 DEFENSE REQUEST AND ALTERNATIVES

In its budget for 1988, the Administration proposes to return to real increases in defense spending, although at a more moderate pace than those of the early 1980s (see Figure 2). The 1988 Department of Defense (DoD)

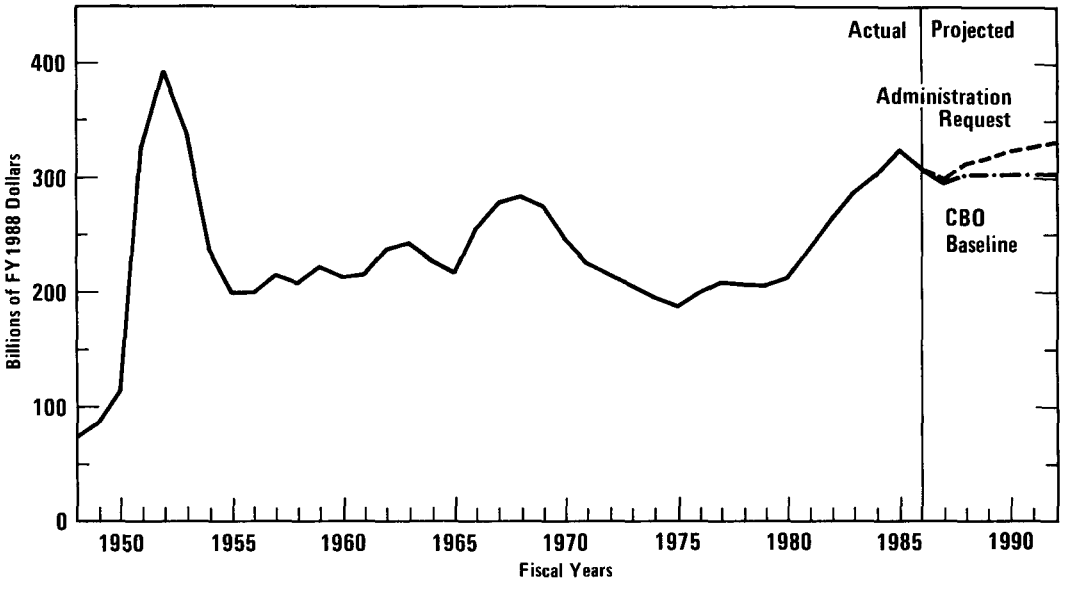
Figure 1.
Fiscal Year 1987 Defense Budget Authority by Appropriation Account



SOURCE: Congressional Budget Office.

Figure 2.

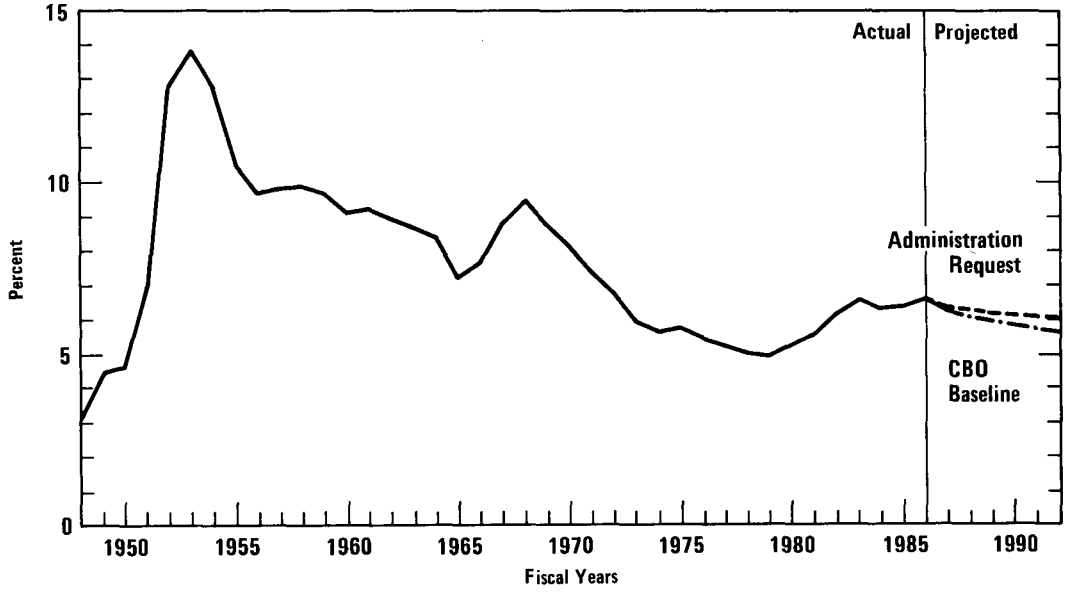
National Defense Budget Authority, Fiscal Years 1948-1992



SOURCE: Congressional Budget Office.

Figure 3.

National Defense Outlays as a Percent of GNP, Fiscal Years 1948-1992



SOURCE: Congressional Budget Office.

five-year plan requests $312.0 billion in national defense budget authority and $297.6 billion in outlays for 1988; by 1992 budget authority rises to $396.9 billion and outlays to $370.9 billion (see Table II-1). For budget authority, this request represents real growth of 3 percent over fiscal year 1987 and an average real growth of 2.3 percent a year from 1988 to 1992, under CBO economic assumptions. The Administration proposals exceed the CBO baseline--which assumes no real growth in defense budget authority--by $10 billion in budget authority in 1988 and by $115 billion over the 1988-1992 period. Outlays exceed the baseline by $8 billion in 1988 and by $72 billion over the five years.

Reducing the Deficit: The CBO Baseline and the Administration's Request

In considering deficit reductions, the Congress establishes a revenue and spending baseline from which to make adjustments. During debate over the budget resolution for 1987, the Congress often used the CBO baseline. That

TABLE II-1. ALTERNATIVE LEVELS OF DEFENSE SPENDING
(By fiscal year, in billions of dollars)

Levels	Actual 1986	Estimated 1987	Projected 1988	1989	1990	1991	1992
CBO Baseline a/							
Budget Authority	289.1	289.6	302.1	315.9	330.2	345.4	361.2
Outlays	273.4	279.5	289.9	303.0	316.6	331.8	346.4
Administration's Request b/							
Budget Authority	289.1	292.9	312.0	332.4	353.5	375.0	396.9
Outlays	273.4	282.2	297.6	312.2	330.0	349.5	370.9

a. The CBO baseline maintains real defense budget authority at the zero growth level throughout the five-year period from 1988 through 1992, using CBO economic assumptions. Outlays are computed using currently estimated spending patterns.

b. The Administration's request is from Budget of the U.S. Government, various years; and Office of Management and Budget, January 5, 1987.

baseline assumed no real growth in defense budget authority, as does this year's version.

Should the Congress again adopt the CBO baseline for use in debating the budget resolution, then a reduction of $10 billion of budget authority from the Administration's request would be needed just to reach the CBO baseline level. But deficit reduction might require that the Congress approve a budget resolution with defense funding below the CBO baseline. For example, if the Congress were to approve budget authority for defense in 1988 at a level of $10 billion below the CBO baseline level, this amount would correspond to a level of $20 billion below the Administration's request.

If the Congress were to make such cuts, it could do so in many ways. In the past, some savings were achieved through use of inflation dividends ($2.6 billion in 1987), some through specific program reductions, and some through general reductions left to DoD to administer. 2/ Indeed, much of this chapter assesses the effects of specific program reductions that could be grouped together with other approaches into packages of changes. To provide a sense of the overall effect of such packages, the next few paragraphs discuss in general terms two strategies that would reduce budget authority $10 billion below the CBO baseline level and $20 billion below the Administration's request. Strategy I follows 1987 Congressional priorities in making 1988 reductions and applies to each 1988 appropriation account the same percentage of the total defense reduction that it received in 1987. 3/ Strategy II would parallel the approach under the Balanced Budget Act (assuming only those exemptions that are already provided in law). The act applies an equal percentage reduction to each appropriation. Table II-2 displays the levels of defense budget authority that would remain under each strategy when starting the reductions from the Administration's budget request. This does not imply that CBO believes that the Administration's defense budget request should be reduced to these amounts or that the strategies presented are the only ways to effect reductions. The levels and strategies chosen here are only for illustration.

Generally, operating costs (defined as appropriations for personnel and operation and maintenance) fare better under Strategy I than under Stra-

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2. When the Administration submits its budget, prices in the budget are based on the Administration's estimate of inflation in the future. When inflation that has been budgeted exceeds actual inflation, the difference is referred to as the "inflation dividend."

3. Budget authority for military personnel would be reduced by an amount equal to 6 percent of the total defense reduction, operation and maintenance by 28 percent, procurement by 36 percent, research and development by 21 percent, and military construction by 6 percent.

tegy II. Although spending levels for operation and maintenance are the same under either strategy, the personnel accounts under Strategy II are nearly $4 billion lower than under Strategy I. Strategy I might require reductions only in the growth in personnel and benefits requested in the Administration's plan, while Strategy II probably would require actual reductions in the current level of forces. Large reductions in force levels could lead to fewer forces stationed abroad or fewer ships deployed at sea at any one time. The amount of any reductions would depend on the amount of savings that could be achieved in other areas, such as recruiting and moving costs.

Investment levels (procurement, research and development, military construction, and atomic energy defense activities) would be higher under

TABLE II-2. LEVELS OF DEFENSE BUDGET AUTHORITY UNDER ALTERNATIVE BUDGET PLANS AND STRATEGIES FOR $20 BILLION REDUCTIONS FROM ADMINISTRATION'S BUDGET REQUEST, FISCAL YEAR 1988, BY APPROPRIATION ACCOUNT (In billions of dollars of budget authority)

Appropriation Account	Administration's Request	CBO Baseline	Repeat Past Priorities (Strategy I)	Uniform Percentage Cuts (Strategy II)
Military Personnel a/	78.3	76.1	77.1	73.3
Operation and Maintenance	86.6	83.4	81.0	81.0
Procurement	84.0	88.7	76.9	78.6
Research and Development	43.7	37.4	39.6	40.9
Military Construction	6.6	5.2	5.4	6.2
Other b/	12.8	11.3	12.0	12.0
Total	312.0	302.1	292.0	292.0

SOURCE: Congressional Budget Office.

a. Includes the Administration's proposed military pay raise.
b. Includes atomic energy defense activities.

Strategy II than under Strategy I. Thus, modernization would continue at a faster pace under Strategy II but more slowly than under the Administration's plan. Both strategies would slow production and research and development of many programs, but Strategy I probably would result in the cancellation or delay of a greater number of procurement and research programs. Under these strategies, investment would consume from 44 percent to 46 percent of the total DoD budget.

SPECIFIC OPTIONS

This section presents 22 specific options to limit spending for national defense. The first 11 alternatives offer lower spending levels by reducing the rate of growth in procurement programs for major systems, such as the MX missile, F-15 aircraft, the Trident submarine, and the C-17 cargo aircraft. Savings would be achieved either by canceling systems, as in DEF-01 and DEF-02, or by slowing the rate of procurement, as in DEF-05.

Options DEF-12 through DEF-15 consider limits on spending in other military investment accounts. Over the next five years, the Administration plans to spend large amounts in areas such as research and development and military construction. Options discussed here would achieve savings greater than those shown for these purposes in either of the strategies above by sharply reducing the rate of growth in these accounts.

Limits on growth in the military forces and on further improvements in readiness are discussed in DEF-16 through DEF-19. Although limiting growth in military forces would provide only small savings in the first year, these options would produce substantial savings once the options were fully implemented. Savings in the operation and maintenance option (DEF-17) are less than savings for this purpose in either of the strategies discussed above.

Finally, DEF-20 and DEF-21 offer savings by limiting the growth in pay and benefits for military personnel. These include alternatives to slow pay increases for active-duty personnel and to increase cost sharing for medical care for military dependents and retirees.

The estimates of savings for all options were made relative to the Administration's proposed budget, using CBO current economic assumptions. The Administration's budget contains the detail necessary to estimate savings for specific program options. When possible, savings relative to both the Administration's request and the CBO baseline are provided. In most cases, savings are rounded to the nearest 100 million dollars, and are given both in budget authority and outlays.

DEF-01 CANCEL PROCUREMENT OF THE F-15

Savings from Admin. Request	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Budget Authority	1,790	1,800	1,930	1,810	1,670	9,000
Outlays	170	810	1,350	1,590	1,700	5,620

The F-15 is the Air Force's premier fighter, capable of operating during day or night and in inclement weather. Its long-range radar and medium-range missile enable the F-15 to attack enemy aircraft before those aircraft can detect and attack the F-15. The Administration plans to purchase 210 of these aircraft over the next five years (42 per year), bringing to about 1,020 the total number of F-15s in the Air Force inventory. For the last three years, however, the Congress has authorized fewer F-15 aircraft than the Administration has requested. Because of the plane's expense, moreover, the Air Force developed the less capable, but cheaper, F-16 to fulfill its total force requirements. The Air Force will have purchased about 1,500 F-16s by the end of 1987 and plans to acquire an additional 870 aircraft from 1988 through 1992.

This option would cancel all further procurement of the F-15. Cancellation would save nearly $1.8 billion in budget authority in 1988 and $9.0 billion over the next five years. During this period, the Air Force will continue to develop the Advanced Tactical Fighter (ATF) at a cost of about $4.8 billion. According to design specifications, the ATF, intended to begin replacing the F-15 in the mid-1990s, should be superior to the F-15. Thus, if the ATF can meet all of its design objectives and enter the force as currently planned, it could provide the United States with a significant increase in tactical aircraft capability. Canceling the F-15 program would provide a greater degree of certainty that the ATF program would be funded as planned if the overall budget for Air Force tactical fighters were further constrained.

The Air Force can meet its goal of 37 tactical fighter wings without additional F-15 purchases and without changing current retirement plans for the F-4s. The Air Force inventory currently contains about 1,000 F-4 fighter aircraft. Cancellation of the F-15 would reduce overall U.S. capacity to produce aircraft, a potential problem in a lengthy war. Furthermore,

the Air Force would acquire only 50 F-15Es--an improved version of the F-15 that the Air Force is now buying for its ground attack mission. This number might be too low to allow military planners sufficient flexibility for employing the aircraft in the broad range of ground attack missions for which it was developed.

DEF-02 CANCEL THE C-17 PROGRAM

Savings from Admin. Request	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Budget Authority	1,940	2,080	2,710	3,020	3,870	13,620
Outlays	690	1,270	1,500	1,850	2,330	7,640

The C-17 is the newest military transport aircraft. It is a four-engine, long-range plane that can carry a maximum payload of 86 tons and operate efficiently on smaller airfields. Along with other airlift aircraft, including the C-5 and the C-141, the C-17 would be used to transport high-priority military equipment and supplies quickly in the event of war.

The Administration requested $217.3 million in 1987 to prepare for procurement of the C-17. The Administration eventually plans to buy 211 C-17s at a cost of $34.5 billion. While the Congress ultimately approved most of the requested funds for 1987, it imposed considerable restrictions on their use, indicating some concerns about the program's justification. Specifically, the 1987 National Defense Authorization Act included a provision preventing the Air Force from obligating more than $64 million in procurement funds before April 15, 1987, by which time the Comptroller General is to report on the cost-effectiveness of the C-17 program and alternatives.

The Administration has requested about $724 million in 1988 to procure the first two aircraft, as well as $1.2 billion for continued development activities. This option would deny any further funds for the C-17. If no alternative aircraft were purchased, cancellation of the program would save $1.9 billion in budget authority in 1988 and $13.6 billion over the next five years.

Although canceling the C-17 would save considerable funds, this option has disadvantages. No currently produced aircraft combines the payload and small-field characteristics of the C-17. These features, coupled with improvements in cargo-handling equipment and performance, would facilitate deploying U.S. forces in difficult to reach areas with limited road networks, such as the Middle East or Central America. Moreover, U.S. strategic (intertheater) airlift capacity, even including the 50 C-5Bs now being procured, could not deliver all the materiel theater commanders say

should be airlifted in the event of a major conflict with the Soviet Union. Moreover, the current fleet of C-141B aircraft, which comprises most of the U.S. strategic airlift assets, is over 20 years old and could need replacement starting in the 1990s. Thus, necessary expenditures might only be deferred, not eliminated, by this option.

On the other hand, recent improvements to the airlift force have increased airlift capability 48 percent since 1981--to a level never before attained by the United States or any other country. As a result, U.S. airlift forces are adequate to cope with most contingencies short of an all-out global war. Thus, the Congress might decide to maintain the size of airlift forces at current levels, accepting the additional risk this implies, and target additional funds toward improving other elements of mobility, such as sealift or prepositioning of equipment and supplies abroad. Although it takes longer, shipping cargo by sea is far less costly than doing so by air.

DEF-03 CANCEL THE ANTISATELLITE MISSILE

Savings from Admin. Request	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Budget Authority a/	420	750	500	500	400	2,570
Outlays	220	430	440	440	390	1,920

a. Savings do not include potential savings either from the termination of programs for modifying the F-15 to carry the Miniature Homing Vehicle or from reductions in military base construction and O&M.

The U.S. antisatellite (ASAT) missile currently under development is being designed to destroy an orbiting enemy satellite by ascending directly into its path. The missile would be launched into space from an F-15 fighter aircraft. Problems with missile guidance and other technical subsystems have caused development delays that have led to increased total program cost. This greater cost, at least in part, has forced the Air Force to reduce the number of ASAT missiles in their procurement plan from more than 100 to 35 and to restrict the deployment of the ASAT equipped F-15 planes from two coasts to one.

Some members of the Congress also contend that U.S. development of a direct-ascent ASAT missile would cause the Soviet Union to develop a similar system, endangering U.S. satellites. The Soviet Union currently has an orbiting ASAT weapon, but it appears to be unreliable and has not been tested regularly in several years. Also, although the Soviet ASAT might be effective against low-altitude U.S. military satellites used for navigation, meteorological surveillance, and other purposes, it cannot reach critical U.S. early warning and communications satellites in high-altitude orbits. To help prevent an arms race between the United States and USSR in direct-ascent ASAT weapons, the Congress has barred the testing of the U.S. ASAT weapon against targets in space during fiscal years 1986 and 1987. The Administration, however, proposes to resume testing in 1988.

This alternative would cancel the current ASAT program and rely instead on evolving technologies that are part of the Strategic Defense Initiative (SDI) research. Savings in fiscal year 1988 would be $420 million in budget authority while savings over the next five years would total $2.6 billion. Some contend this option would not affect U.S. security because the

direct-ascent technology is rapidly becoming obsolete. Ground-based lasers or other directed-energy weapons now under study might prove to be more effective in "blinding" or destroying satellites. The Air Force, however, does not plan to decide until 1990 or 1991 whether to shift solely to a more advanced system developed under the Strategic Defense Initiative, or to continue to rely on direct-ascent weapons, or to pursue both technologies.

DEF-04 CANCEL TRIDENT REFIT PROGRAM

Savings from Admin. Request	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Budget Authority	60	200	130	310	280	980
Outlays	10	50	110	190	250	610

The U.S. Navy is currently developing and buying a new submarine-launched ballistic missile (SLBM), the Trident II, for deployment in Trident submarines. This new missile will be deployed as original equipment in the ninth and subsequent Trident submarines. The Navy plans to refit the first eight Trident submarines, currently armed with Trident I SLBMs, to carry the Trident II. This option would cancel the plan to deploy the Trident II on these eight submarines.

The Navy's rationale for the refitting program is based on the better accuracy and larger payload of the Trident II. Whereas the Trident I has moderate accuracy and carries eight Mark IV warheads, the Trident II will be roughly twice as accurate and will carry either about twelve Mark IV warheads or about eight more powerful Mark V warheads. The improved accuracy of the Trident II missile and the alternative of employing larger warheads would greatly enhance U.S. capability to destroy enemy targets, such as Soviet silos for intercontinental ballistic missiles (ICBM) and command and control centers, both of which are hardened to withstand nuclear blasts.

But the plan to refit the first eight submarines is expensive. Canceling the refits would save $60 million in budget authority in 1988 and nearly $1 billion over the next five years. This alternative would also reduce the procurement of the Trident II by about 180 missiles, saving about $6 billion, although these savings are not likely to be realized until the mid-to-late 1990s at the end of the Trident II procurement.

This option would preserve about 1,500 warheads capable of destroying softer targets instead of deploying about 1,900 new warheads with greater capability against hardened targets. Assuming that the United States deployed a fleet of 20 Trident submarines as currently planned, this change would not significantly affect the ability of the entire U.S. ballistic missile

force--including both land-based and submarine-based missiles--to destroy either small or large sets (500 to 2,000) of hardened enemy targets. This change, however, would decrease by about 10 percent the portion of a large set of hardened targets that could be destroyed by U.S. SLBMs alone. The SLBMs might have to attack these targets alone if U.S. land-based missiles were destroyed by a Soviet attack.

DEF-05 SLOW TRIDENT SSBN CONSTRUCTION

Savings from Admin. Request	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Budget Authority	1,330	150	10	1,310	150	2,950
Outlays	70	200	300	320	450	1,340

The Trident submarine is the Navy's most advanced platform for submarine-launched ballistic missiles (SLBMs), the sea-based leg of the U.S. strategic nuclear triad. The first eight Trident submarines now carry Trident I SLBMs (see DEF-04). Subsequent Trident submarines will carry the new Trident II missile, which is scheduled for deployment on the ninth Trident submarine in 1990.

As of 1987, the Congress has fully funded the construction of 14 Trident submarines and authorized advanced procurement for the sixteenth ship. According to the fiscal year 1988 Five-Year Defense Plan, the Administration plans in 1988 to fund fully the fifteenth ship and advanced procurement for the seventeenth ship. An additional submarine would be funded in each subsequent year of the current five-year plan.

The Congress could consider funding new Trident submarines at an average rate of one every 1.5 years as opposed to one every year as the Administration proposes. Indeed, in order to meet budgetary objectives, the House Armed Services Committee recommended in its report on the 1987 National Defense Authorization Act that the Trident submarine not be funded in 1987. This recommendation was reversed, however, in conference.

This alternative would not fund a Trident submarine in 1988 and would fund three rather than four submarines in the 1989-1992 period. This would save $1.3 billion in budget authority in 1988 and nearly $3.0 billion during the next five years. These savings would be permanent, however, only if the United States were to deploy fewer than the 20 Trident submarines the Navy currently envisions. Otherwise, the cost of acquiring the full 20 submarines would simply be deferred.

This option would certainly delay U.S. missile deployments, but, because of the long time period required to construct Trident submarines, the